Light Reflector

At right, a fluorescent lighting fixture is getting a boost in reflectivity through installation of Lightdriver®, a thin, tough thermoplastic film plated with aluminum capable of reflecting 95 percent of the visible light striking it. Lightdriver is marketed by Ultra Sales, Inc., Colonia, New Jersey.

Lightdriver increases brightness without adding bulbs and allows energy savings by removing some bulbs, because the mirrorlike surface cuts the light loss generally occasioned by the conventional low reflectivity white painted surface above the bulbs in many fluorescent fixtures. With Lightdriver, says Ultra Sales, a 45 percent reduction in electricity usage is attainable by removing two of the bulbs in a four bulb fixture; the remaining two will still provide excellent lighting.
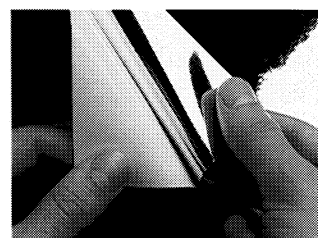
Additional savings accrue from lower air conditioning bills due to fewer heat-producing bulbs in use and from bulb replacement costs. Bonus advantages include even lighting throughout a work area, less glare and eyestrain, and the fact that Lightdriver does not reflect most ultraviolet light.

Sold in sheets and cut to fit fixtures, Lightdriver is made in three layers: the thermoplastic film, which protects the reflective surface from corrosion and insulates it electrically; the aluminum reflector, which provides greater reflectivity than a standard mirror; and a permanent adhesive with removable backing (top) for simple installation.

Lightdriver is one more adaptation of a spinoff metallization technology that originated in a 1960 NASA project involving development of a lightweight, highly reflective skin for a balloon type satellite. The need was met by Metallized Products (MP), Winchester, Massachusetts (see page 70), which developed a metallized plastic film coated with a mist of aluminum particles. That development triggered extensive R&D by MP and other companies on metallized materials, which found broad application as reflecting insulators and radiation barriers in space systems and in a broad range of commercial products. ▲

®Lightdriver is a registered trademark of Ultra Sales, Inc.